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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,191	11/17/2000	Christof Mock	199750US0	5418

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EXAMINER

ROCHE, LEANNA M

ART UNIT	PAPER NUMBER
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1771

2

DATE MAILED: 08/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

8W

Office Action Summary	Application No.	Applicant(s)	
	09/714,191	MOCK ET AL.	
	Examiner	Art Unit	
	Leanna Roche	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, drawn to a sandwich panel, classified in class 428, subclass 318.4
 - II. Claim 5 drawn to a process for producing a foam panel, classified in class 521 , subclass 919.
 - III. Claim 6, drawn to a process for producing a sandwich panel, classified in class 264, subclass 45.1+.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions of Group II and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process as claimed can be used to make another and materially different product such as a foam panel without cover layers.
3. Inventions of Group III and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different

process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as by extruding the cover layers onto the surface of a foam panel.

4. Inventions of Group II and Group III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a single foam layer without cover layers and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Thomas Varnes on August 7, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-4. Affirmation of this election must be made by applicant in replying to this

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Office action. Claims 5 and 6 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. Additionally, it is noted that should the claims of Group I be found allowable, the claims of Groups II and III will be subject to rejoinder pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), wherein claims directed to the process of making or using a patentable product, previously withdrawn from consideration as a result of a restriction requirement, are subject to being rejoined and fully examined for patentability under 37 CFR 1.104.

Claim Objections

9. Claim 1 is objected to because of the following informalities: the term "recyclate" in line 7 of Claim 1 is not a proper English term. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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11. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 1 is vague and indefinite because it claims "cover layers" and "decorative layers" but does not specify how many cover layers or decorative layers are required to make the sandwich panel, nor does it disclose whether the cover layers are applied to one surface or both surfaces of the core layer. For the purposes of examination, the examiner has interpreted this language to mean a sandwich panel with at least two cover layers and optionally at least two decorative layers, which may be applied to either one surface of the core or both surfaces of the core layer.

13. Claim 4 is vague and indefinite because it claims "a laminated or unlaminated foam film." This appears to be a literal translation into English from a foreign document and it is unclear what Applicant intends to claim. For the purposes of examination, this phrase has been interpreted to mean "a foam bonded to a film by lamination or some other means, such as by an adhesive layer." Clarification is required.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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15. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erhardt (USPN 5876534) in view of Murakami et al. (USPN 5817420).

Erhardt is directed to a composite panel for making molded parts for motor vehicles. The composite panel is comprised of a foamed thermoplastic core with fiberglass mat-reinforced outer layers. The thermoplastic core is comprised of foamed polypropylene and the fiberglass mats are impregnated with polypropylene. This reads on Applicant's core layer of polypropylene particle foam and cover layers of fiber-reinforced polypropylene.

Erhardt does not specifically disclose decorative layers. However, the decorative layers claimed by Applicant are optional. Therefore, a composite panel without decorative layers reads on Applicant's sandwich panel.

Erhardt does not specifically use 1 to 30% by weight recycled material comprised of particles of the core and outer layers. However, Murakami teaches that recycling materials from vehicle parts is becoming more and more necessary for environmental reasons. Murakami discloses that it is known to use recycled material from molded vehicle parts to form new molded vehicle parts. Murakami cites JP-A-5-154861 and JP-A-5-169479, which disclose using at least 76 parts by weight new materials which results in up to 24 parts by weight recycled materials (Column 1, lines 49-62). Murakami also discloses that it is known in the art of sandwich panels to use recycled material for the core of a sandwich molding while using new material for the outer layers to improve impact resistance (Column 2, lines 9-15). Therefore, it would have been obvious to the skilled artisan at the time this invention was made to use 1 to 30% by

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weight recycled material comprised of particles of the core and outer layers to make the core layer of a sandwich panel, motivated by the desire to reduce waste and cost and improve the environmental impact of the production of the sandwich panels.

16. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erhardt (USPN 5876534) in view of Murakami et al. (USPN 5817420) as applied to claim 1 above, and further in view of Seiler et al. (USPN 5122398).

Erhardt in view of Murakami teaches the claimed sandwich panel, but does not specifically disclose the weight percent value of the fiberglass mats in the outer layers of the composite panel. Seiler teaches a recyclable automobile bumper system having an outer layer of glass fiber reinforced propylene polymer containing a glass fiber content of at least 30% by weight, and preferably 40 to 70% by weight (Column 2, lines 14-19). Therefore, it would have been obvious to the skilled artisan at the time this invention was made to use 10 to 60% by weight glass fibers or 20 to 50% by weight glass mats in the outer layer of the composite panel, since it is known in the art of automobile bumper systems to use a glass fiber content of at least 30% by weight, and preferably 40 to 70% by weight. Additionally, it would have been obvious to the skilled artisan at the time this invention was made to use 10 to 60% by weight glass fibers or 20 to 50% by weight glass mats in the outer layer of the composite panel, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. See *In re Aller*, 105 USPQ 233.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See JP 5-154861 and JP 5-169479 with regard to using up to 24% recycled material in the formation of vehicle parts. See DE 19544451 for a structurally identical sandwich panel made without recycled material.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leanna Roche whose telephone number is 703-308-6549. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm (with alternate Mondays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



lmr
August 9, 2002



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